

APPENDIX E-261 P

SUPPLY CONTROL WORKSHEET

1. PURPOSE

This procedure is applicable to chapter 34 and provides detailed instructions required for the preparation of the Supply Control Worksheet (DLA Form 949), appendix C-117. This worksheet may be used to manually determine System and Depot Procurement quantities, and to validate mechanical computations on the Low Value Procurement Listing (appendix F-168), or line 55 (Over/Short to PLT) and line 56 (Assets at Delivery on the Standard Supply Control Study (appendix F-167)). As required, preparation of this worksheet may also be used for justification and backup purposes, when a manual Walk-Thru procurement is initiated for stock.

2. APPENDICES USED IN THIS PROCESS

- a. Appendix A-59, Asset Group Codes.
- b. Appendix C-117, Supply Control Worksheet (DLA 949).
- c. Appendix F-167, Standard Supply Control Study.
- d. Appendix F-168, Low Value Procurement Listing.

3. RESPONSIBLE ORGANIZATIONAL ELEMENT

Item Manager (IM) within the Directorate of Supply Operations (DSO).

4. PROCEDURES/INSTRUCTIONS

Detailed instructions on the method of computation of the individual columns on the Supply Control Worksheet are listed below. In addition, each column entry reflects the applicable line on the Standard Supply Control Study (SSCS) and applicable column on the Low Value Procurement (LVP) Listing.

- a. Column A (DEPOT) - (SSCS, line 27). Obtain the RICs for each Preferred Storage Location (PSL) from the SSCS/LVP and enter them in column A. Enter Total following last RIC.
- b. Column B (PRDA/MOB DIST FACTOR) - (SSCS, line 39). Enter the applicable PRDA and MOB Distribution Factor for each PSL in column B.
- c. Column C (DEPOT BACKORDERS) - (SSCS, line 41). Enter recorded Backorders at the appropriate PSL and enter total quantity of backorders on Total Line.
- d. Column D (PMRMR) - (SSCS, line 40). If PMRMR Quantity is applicable, enter total quantity on the Total line of column D. For each PSL, multiply the total quantity by the MOB Distribution Factor and enter this value on the applicable PSL line.

e. Column E (SAFETY LEVEL) - (SSCS, line 42).

(1) Enter the System Safety Level Quantity on the Total line of column E. Multiply this quantity by each PSL PRDA value and enter result on the applicable PSL line.

(2) If a Fleet Issue Load List (FILL) quantity exists at Norfolk or Oakland, determine if the FILL quantity exceeds the Safety Level Quantity for NNC/NOC and, if so, the difference is the FILL increment which will be added to the Safety Level of Norfolk/Oakland and the System Safety Level on the Total line, column E, F-168. The Safety Level on line 16, column H and line 42, column B, F-167, includes the FILL increment, when applicable. When a FILL increment exists, the determination of Safety Level for each location is based on the System Safety Level minus the FILL increment after which the FILL increment is added to NNC/NOC and the Safety Level must equal the FILL quantity.

f. Columns F and G (PROCUREMENT LEADTIME) - (SSCS, line 43).

(1) Column F (RECURRING DEMAND) of the Supply Control Worksheet will be mechanically derived as follows: The total Recurring Demand Quantity forecasted during the Procurement Leadtime will be entered on the Total line of column F. Multiply this quantity by the PRDA value of each PSL and enter the result on the applicable PSL line.

(2) Column G (NONRECURRING DEMAND) of the worksheet will be mechanically derived as follows: Enter nonrecurring demands (SPR, MAP or Provisioning or Other) on the appropriate PSL line of column G. Add all PSL lines and enter result on Total line.

(3) Procurement Leadtime (ALT+PLT) quantities will be manually obtained for the worksheet as follows:

(a) Determine day, month and year of start of ALT and PLT time period. (The ALT starts the day after the cutoff date of the study and the PLT starts the day after the end of the ALT.)

(b) Multiply the number of days in ALT times the QFD and divide by the number of days in the quarter covering the time period of the ALT and round up all fractions. When the number of days carries over into another quarter having different number of days, (e.g., April through June has 91 days and July through August has 92 days) use the number of days in ALT to the end of the quarter and if there are remaining days in ALT that go into the next quarter, repeat the computation using the remaining days and divide by the number of days in the next quarter. If ALT was 60 days and start of ALT was 15 May, the computation would be 47 (15 May - 30 June) X QFD -: 91 and 13 (1 July - 13 July) X QFD -: 92; the sum of the two results represent the ALT requirement. When two or more computations are necessary, due to long leadtime and different days in the quarter, carry the fractions for summing purposes and then round up.

(c) Determine PLT requirements in the same manner as ALT requirements. Enter the sum of ALT and PLT requirements in column F Total line of the worksheet. Multiply this quantity by the PRDA value of each PSL and enter the results on applicable PSL line.

(d) Enter quantities for SPR, MAP, Provisioning or Other Nonrecurring Requirements which fall in the Procurement Leadtime period in column G on applicable PSL line of the worksheet. When Nonrecurring Requirements cannot be identified to a PSL, they will be reflected on the PSL line having the largest PRDA.

(4) For the SSCS, enter Procurement Leadtime Requirements from line 43 of the SSCS on the appropriate PSL line in column F of the worksheet; Total line will be taken from line 43, column B (this includes nonrecurring demands).

(5) For the F-168, enter the total Procurement Leadtime Requirements, in columns F and G of the worksheet from the Total line, column F. Multiply this quantity by each PSL PRDA and enter results on applicable PSL line.

g. Column J (ASSETS) - (SSCS, line 53). (Column J consists of Asset Group 3, less Asset Group 2, whereas line 53, SSCS consists of Asset Groups 3, 7, 28, 31, 10 and 22.)

(1) Column J must be completed prior to computation of the Procurement Cycle Quantity in column H.

(2) Enter the Total Applicable Assets on the appropriate PSL lines. Add these quantities and enter the result on the Total line of column J.

h. Column H (PROCUREMENT CYCLE QUANTITY) - (SSCS, line 44).

(1) Add the Total line quantities in columns C, D, E, F, G, and H, F-168 or column B, line 46 of SSCS, to obtain total requirements and enter this quantity in block (A) of the worksheet. When Special Program Requirements, Provisioning Requirements or Other Nonrecurring Requirements have support dates falling within the Procurement Cycle period of two years or greater, such requirements will not be included in the computation of requirements for low value items. These requirements are included in line 19 of the SSCS, but are excluded from line 44.

(2) Procurement Cycle quantities will be manually obtained for the worksheet in the same manner as ALT and PLT; however, when the Procurement Cycle exceeds one year or when going from one year to a subsequent year, additional steps are required in determining the end of the time period. Chapter 35, provides a chart depicting the number of days in applicable months.

(a) The Procurement Cycle period starts on the day after the end of the production leadtime and ends on the last day of the number of days in the Procurement Cycle.

(b) The end of the time period can be determined as follows starting with the cutoff date of the SSCS.

(Example: Proc Cycle is 27 months or 822 days and starts on 68015 and ends on 70105)

67273 (Cutoff) + 30 (ALT)	=	67303
67303 + 76 (PLT)	=	67379
67379 + 635	=	68014
68014 + 2000 (2 Yrs)	=	70014
70014 + 91	=	70105

When the PLT date goes beyond 365 (last day of year), add 635 days; if Procurement Cycle is one or three years add 1000 or 3000 days respectively; if Procurement Cycle is two years add 2000 plus multiples of 1, 3, 6 (Days in Months); if Procurement Cycle is less than one year add the number of days in applicable months.

(3) Divide Standard Price of the item into the Minimum Procurement Dollar Value (established by each DSC in appendix F-261 - policy table 018). The result is the smallest quantity authorized for procurement and will be entered in block (B) of the worksheet.

(4) Subtract Total Applicable Assets (column J less Asset Groups 10 and 22 for F-167 or column J, Asset Group 3 less Asset Group 2 for F-168) from Total Requirements (block A) and enter the results in block C.

(5) If the entry in block (C) is equal to, or greater than, the entry in block (B), enter the Procurement Cycle Quantity (SSCS, line 44 or column H, Total line of F-168) in Total line of column H. If the entry in block (C) is less than (B), add the difference to the Procurement Cycle Quantity and enter the result in Total line of column H.

(6) Multiply the quantity entered in Total line of column H by each PSL PRDA Value and enter result on the applicable PSL line.

i. Column I (TOTAL) - (SSCS, line 46). Enter the sum of columns C, D, E, F, G, and H, for each PSL and Total line, in column I.

j. Column K (OVER/SHORT TO PLT AND BOs) - (SSCS, line 55).

(1) This column reflects the asset position at the end of the PLT Period. A plus sign (+) indicates an excess and a minus sign (-) indicates a deficiency to requirements during this period of time.

(2) For each PSL line, and Total line, subtract the entry in column I from the sum of columns C, F, and G (F-168) or subtract the entry in column I (less Asset Groups 10 and 22, appendix A-59) from the sum of columns C, F, and G (F-167). Enter this result in column K of the worksheet with a Positive (+) or Negative (-) sign, i.e., if assets (column J) exceed requirements in columns C, F, and G (Depot Backorders and Procurement Leadtime), the entry in column K will be a plus (+) indicating an overage to PLT requirements.

k. Column (L1). This column is a parenthetical entry column which will be utilized ONLY when the entry in the Total line of column K, F-168 or line 55, column B, F-167, is a POSITIVE (Overage) entry and one or more PSL line entries are NEGATIVE (Shortage). When utilized, this column helps determine the assets at Delivery (column L).

(1) Add all column K PSL negative entries and enter result in block (D) of worksheet.

(2) Add all column K PSL positive entries and enter result in block (E) of worksheet.

(3) Divide the sum of all negative entries (block D of the worksheet) by the sum of the positive entries (block E of the worksheet) and enter results in column immediately following column E of the worksheet; multiply these results by each PSL positive quantity (locations with overages) and enter the negative value in column L1.

(4) For each column K negative entry, enter the same quantity as a positive entry in column L1.

(5) The sum of all column L1 entries should equal zero. If not, adjust the largest negative entry so that the sum does equal zero.

1. Column L (ASSETS AT DELIVERY) - (SSCS, line 56).

(1) Column L will reflect the expected asset position at that point in time when the first delivery of materiel is scheduled.

(2) Four separate procedures are required to develop the entries in column L (F-168), or line 56 (F-167) based on the algebraic entries in column K (F-168) or line 55 (F-167). These procedures are as follows:

(a) If the entry in Total line of column K or line 55, column B is negative:

1. Enter Total line entry from column K in column L Total line; enter line 55, column B, in line 56, column B.

2. Multiply the above respective entries by each PSL PRDA value and enter the result on applicable PSL line of column L or line 56, columns C-P, as a negative quantity.

(b) If the entry in Total line of column K or line 55, column B, is zero, enter zero in all PSL lines and Total line of column L or line 56, column B.

(c) If the entry in the Total line of column K or line 55, column B, is positive but one or more PSL entries in column K or line 55, column B, are negative:

1. This situation requires the use of column L1 as described in paragraph 4k above.

2. For each line, enter the algebraic sum of column K plus column L1, in column L.

(d) If all entries in column K or line 56, columns C-P are positive, for each respective entry, enter the same value (positive quantity) in column L or line 56, columns C-P.

m. Column M (Shortage). For each line on the worksheet, if column L entry is a positive value, subtract the value in column L from the sum of columns D, E and H (PMRMR, Safety Level, and EOQ/Procurement Cycle); if column L entry is a negative value, add the value to the sum of columns D, E and H. Enter the results of the above on the applicable PSL line in column M and the sum of the PSL entries on the Total line. This computation provides the Total Shortage (by PSL) to the DSC Procurement Objective.

(1) When a column L positive value exceeds the sum of columns D, E, and H, enter a negative (-) value in column M.

(2) A negative value in column M indicates that assets at a given PSL exceed the requirements through the Procurement Cycle rather than the PSL having a shortage.

n. Column (N1). This column is a parenthetical entry column which will be utilized whenever a negative entry appears in column M.

(1) Add PRDA values together for all column M positive PSL values (representing locations with shortages) and enter the results in block F of the worksheet.

(2) Add all column M negative PSL entries (not PRDA values), representing locations with overages, and enter the results in block (G) of the worksheet.

(3) Divide each column M positive PRDA value (locations with shortages) by the sum of PRDA values in column F. Multiply the results by the sum of negative PSL entries (locations with overages) in block (G). Enter final results in column N1.

(4) For each column M PSL negative entry, enter the same quantity as a positive entry in column N1.

(5) The sum of all column N1 entries should equal zero. If not, adjust the largest PSL quantity so that the sum equals zero.

o. Column N (ADJUSTED SHORTAGE). Column N reflects the adjusted quantity of an item required to support the requirements of each PSL through the Procurement Cycle period.

(1) If a negative entry appears on any line in column M, for each line enter the algebraic sum of column M plus column N1 in column N.

(2) If all column M entries are positive, enter each column M line entry in column N.

(3) When completing the worksheet for reasons other than validating the F-168, Low Value Procurement Listing, and assets in Asset Groups 10 and 22 are applicable, further adjustment must be made to reduce the adjusted shortage by the quantities in these Asset Groups prior to completing column 0. Assets will be reflected against the applicable PSL and applied at the end of the Procurement Cycle. Excluded from Asset Group 22 are Asset Group 11 Logistics Reassignment Type Due-In Codes TD_/TP_ for items with Logistics Reassignment (LR).

(a) Asset Group 22, Due-In (Returns and Transfers) will be applied first and then Asset Group 10, Unserviceable Due-In and Stock On Hand Unserviceable (less Asset Group 8B).

(b) After the application of Asset Groups 10 and 22, if there are locations with overages and more than one location with a shortage, the steps in subparagraph 4n (column N1) must be repeated to allocate the overages. If there are locations with overages and only one location with a shortage, the overage will be applied to the location having the shortage.

(c) Column N may be divided horizontally, using the upper half for the adjusted shortage without application of Asset Groups 10 and 22 and the lower half with the adjustment by application of Asset Groups 10 and 22. Assets by location and type should be reflected on the bottom portion of the form.

(4) Enter the sum of PSL entries on the Total line.

p. Column O (PROCURE).

(1) For each PSL, adjust column N entry to Unit Pack and enter in column O.

(2) SSDs and DSSPs with an entry in column N must receive at least one Unit Pack.

(3) If column O entry times Standard Price is less than the Minimum Location Value:

(a) If value is greater than one half Minimum Location Value, round up to the Minimum Value; quantity must equal unit pack even though it exceeds Minimum Location Value.

(b) If value is less than one half Minimum Location Value, but the PSL is an SSD or a DSSP, round up to the Minimum Value; quantity must equal unit pack even though it exceeds Minimum Location Value.

(c) If value is less than one half Minimum Location Value and the PSL is not an SSD or DSSP, change column O entry to zero.

(4) Enter sum of column O PSL entries in Total line.

(5) Round entry in Total line of column N to Unit Pack and enter in block (H) of worksheet.

(6) Compare column O Total line entry with entry in block (H).

(a) If equal, end procedure.

(b) If not equal, replace column O entry with value in block (H) and adjust the largest PSL entry in column O to reflect the revision and end procedure.

q. Throughout this procedure, if a column total quantity does not equal the sum of the PSL quantities, due to the multiplication by PRDA values, the largest PSL quantity will be adjusted up or down to compensate for the difference. When MOB Factors (War Distribution Factors (WDFs)) are involved, adjustment will be made as follows:

(1) The location having the largest entry will be adjusted, or

(2) If MOB factors are the same for two locations and the OWRMRP (PMRMR) is an uneven quantity, a quantity of 1 will be positioned at the location having the largest quantity, or

(3) If the MOB factors are the same at two locations, but the sum of the three locations is different than the System OWRMRP (PMRMR), the location having the different MOB factor will be decreased by the amount of the difference.

r. In all calculations, the computer will not round up or down in the generally accepted method. All fractions, whether greater or less than .5, will be dropped at each PSL.

s. Criteria for Determination of Buy Quantities for Shelf-Life Items and Items not having a PRDA. Determination of Buy Quantities for Shelf-Life Items when ROP is reached will be determined:

(1) Determine shelf-life requirements by projecting recurring and nonrecurring requirements starting with the first day of the Procurement Cycle Period through the Shelf-Life Period less OWRMRP (PMRMR) and Safety Level Requirements including FILL Increment.

(2) When operating level equals Procurement Cycle.

(a) Determine Procurement Cycle Period requirements. If quantity in subparagraph (1) above equals or exceeds the Procurement Cycle Period requirements, normal procedures will apply.

(b) If quantity in subparagraph (1) above is less than the Procurement Cycle Period requirements, determine a three month requirement (QFD). If the three month requirement (QFD) is equal to or less than the quantity in subparagraph (1) above, the quantity in subparagraph (1) will become the new Procurement Cycle Period requirement used in the ROP study output to the IM.

(c) If the three month requirement (QFD) exceeds the quantity in subparagraph (1) above, a ROP study with Reason For Study Code RP/ER will be output to the Item Manager with the normal Procurement Cycle Period requirements. The IM will change the OWRMRP (PMRMR), SL and Procurement Cycle Period requirements as appropriate.

(3) When the operating level months is less than the Procurement Cycle Period months:

(a) Determine operating level requirements starting with the first day of the procurement cycle through the operating level months. If quantity in subparagraph (1) above equals or exceeds the operating level requirements, normal study procedures apply.

(b) If quantity in subparagraph (1) above is less than operating level requirements, generate ROP study with Reason For Study Codes RP/ER with normal procurement cycle requirements. The IM will adjust OWRMRP (PMRMR) SL and Procurement Cycle Period requirements as appropriate.

(4) When ER Reason For Study Code is used with shelf-life procurements, normal procurement quantities are placed in the batch control and recommended buy transactions.

NOTE: In either method, a manager adjustment will be required.

(5) Adjustment of assets for shelf-life items - ROP and General Studies. Current programs provide for the adjustment of procurement quantities by location for shelf-life items and for other items where restrictions on application of assets apply. Explanation of current method is as follows:

(a) In a few exceptional cases, the determination of procurement quantities by location is complicated by the following assets:

1. Serviceable Stock On Hand (SOH) (Asset Group 3) subject to deterioration.

2. Unserviceable Stock On Hand Scheduled (Asset Group 7) subject to deterioration.

3. Unserviceable Stock On Hand Unscheduled (Asset Group 10) excess to Procurement Leadtime and Procurement Cycle requirements.

4. Returns and Transfers Due-In (Asset Group 22) excess to Procurement Leadtime and Procurement Cycle Period requirements, exclude Asset Group 11 Type Due-In Codes TD_/TP_ assets from AG 22 which are applied to AGs 28 and 31 for any computational purposes for items with Logistics Reassignment.

(b) The above assets are shown in the Depot Analysis Section on lines 47, 48, 49 and 52, respectively. These lines also contain those assets applied in the Systems Analysis Section. It would be impossible to make a discrete determination of inapplicable assets by type and location. The following procedures are used to distribute the system buy quantity by location according to the location requirements and asset status:

1. The procurement total (line 63) is the sum of the OWRMRP (line 40), Safety Level (line 42), Procurement Cycle (line 44), Adjustment Line (Work Area #1), minus over/short to PLT (line 56), Unserviceable Unscheduled (line 49), and other Due-In (line 52).

2. The Adjustment line (Work Area #1) is computed as follows: The System sum of assets subject to deterioration, unapplied returns (Asset Group 22), and unapplied unserviceable unscheduled stock is allocated to locations according to the PRDA. Asset Group 22 excludes AG 11 identified Type Due-In Codes TD_/TP_ assets from AG 22 that are applied to AGs 28 and 31 for computational purposes for items with LR.

3. If any of the location procurement quantities (as determined above) are less than zero (-), actions are as follows:

a. Line 63 is moved to the Adjustment line.

b. Line 63 is filled with zero quantities.

c. Compute adjustment factor: (Sum of minus quantities) divided by (sum of plus quantities).

d. Each location (line 63) is computed according to: subparagraphs (1) or (2) below.

(1) If location entry (Work Area line) is minus (-), compute line 63 entry equal to Work Area entry times minus 1 (-1). This procedure actually disregards minus quantities. The preceding is the mathematical explanation.

(2) If location entry (Work Area line) is not less than zero, compute line 63 entry equal to Work Area entry times adjustment factor determined in subparagraph 3c above.

e. Add Work Area to line 63.

f. Subsequent adjustments are made to line 63 entries as required by minimum buy criteria and unit pack adjustments.

(6) Computations of net depot quantities for locations not having PRDA:

(a) Shortage to PLT and backorders line 55, and assets at delivery line 56 will not be changed.

(b) When a OWRMRP (PMRMR), SL (FILL) and Procurement Cycle exist for an item not having a PRDA but is a preferred storage location, a net buy will be determined based on these requirements and entered on lines 57-63 as applicable.

(c) When a safety level requirement based on FILL exists and Norfolk and Oakland are not listed in the Storage Mission Code Table (MPT001) as preferred, but are listed as prime, a location will be opened and requirements determined as outlined in subparagraph (3) (b) above.

(d) When requirements exist for other nonpreferred locations (prime) that are in the Storage Mission Code Table (MPT001), requirements will be rolled up to the preferred location.

(7) Subparagraph (3) (d) has been programmed under the assumption that each Storage Mission Table must contain all Prime Storage Location Areas. Requirements without a preferred location RIC are assigned as follows:

(a) Blank RIC: Assigned to preferred location with the largest PRDA.

(b) Nonprime RICs are assigned to the nearest prime location according to Area Codes in the Distribution Source Preference Table.

(c) Nonpreferred (Prime) Locations are rolled up.

(8) Computation of Net Depot Quantities when system is out of balance.

In order to determine line 63 of SSCS for items that have reached the Reorder Point and a location has stock on hand or a return that filters through the Procurement Cycles time period, an adjustment factor must be computed.

(a) Compute adjustment factor as follows: Divide sum of minus (-) quantities (column M) by the sum of plus quantities (column M).

(b) Multiply each positive entry (column M) by adjustment factor.

(c) Subtract result from positive entry (column M). Balance is quantity to be procured.

(d) Adjust quantity to be procured to Unit Pack or Minimum System Buy quantity.

5. FLOWCHART

Flowchart not required.